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DEC 27 1985

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
Telephone: (801) 538-5340

DIVISION OF OIL
GAS & MINING

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS
and
MINING AND RECLAMATION PLAN

Based on Provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, General Rules and Regulations and Rules of Practice and Procedures, By Order of the Board of Oil, Gas and Mining.

Mine Name: CASTLE VALLEY Mine Plan Date: 12/21/85
File No.: ACT/ / Date Received:
Operator: A.J. CORNELL DOGM Lead Reviewer:
Mineral(s) to be Mined: Gypsum

Please attach other sheets as needed and include cross-reference page numbers when used.

- Name of Applicant or Company: CASTLE VALLEY MINING COMPANY the BLM
Corporation ☒ Partnership () Individual ()
- Address: Permanent: PO BOX 1240
CASTLEDALE, UTAH 84513
Temporary:
2nd address Bureau
PO BOX 126
Spokane,
Washington 99210
International Mining Corp
- Company Representative: Name: A.J. CORNELL
Title: PRESIDENT
Address: P.O. Box 1240 CASTLE DALE Phone: 801 637 3520
UT 84513 381 5590
509-458-7887
no longer a company
boogus #125
Territory Land Realty
- Location of Operation: County(ies) EMERY
Township(s): 19S Range(s): 10E Section(s): 23
Township(s): Range(s): Section(s):
Township(s): Range(s): Section(s):
- Owner(s) of record of the surface area within the land to be affected:
PUBLIC LAND

Name: Address:
Name: Address:
Name: Address:
Name: Address:

6. Owner(s) of record of the minerals to be mined:

US GOVT

Name: _____	Address: _____
Name: _____	Address: _____
Name: _____	Address: _____
Name: _____	Address: _____

7. Owner(s) of record of all other minerals, including oil and gas, within any part of the land to be affected:

US GOVT

Name: _____	Address: _____
Name: _____	Address: _____
Name: _____	Address: _____

8. Have the above owners been notified in writing? (x) Yes, () No. If no, why not?

MINING CLAIMS have been Recorded with BLM
And A MINING PLAN has been submitted

9. Have you or any other person, partnership or corporation associated with you received an approval of a Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein? () Yes, (X) No. If yes, list all approval numbers now under surety:

10. Source of Operator's legal right to enter and conduct operations on the land to be covered by this Notice:

1872 MINING LAW

11. Give the names and mailing addresses of every principal Executive, Office, Partner (or person performing a similar function) of Applicant:

Name	Title	Address
A. <u>A.J. CORNELL</u>	<u>president</u>	<u>PO Box 1270 Castle Dale</u>
B. _____	_____	<u>UT 84513</u>
C. _____	_____	_____
D. _____	_____	_____

12. Has the Applicant, any subsidiary or affiliate or any person, partnership, association, trust or corporation controlled by or under common control with the Applicant, or any person required to be identified by Item 11 ever had an approval of a Notice of Intention to Mine or Explore withdrawn or has surety relating thereto ever been forfeited? () Yes, (X) No.

If yes, please explain: _____

Please note: Section 40-8-13 of the Act provides that information relating to the location, size or nature of the deposit, and marked confidential by the Operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the Operator, or until the mining operation has been terminated as provided in Subsection (2) of Section 40-8-21 of the Act. This material should be so marked and included on separate cross-referenced sheets.

13. All maps and plans prepared for submission shall be of adequate scale and detail to show topographic features and clearly indicate the following details:

- A. Location and delineation of the extent of the land previously affected, as well as the proposed surface disturbance.
- B. Existing active or inactive, underground or surface mined areas.
- C. Boundaries of surface properties, including ownership.
- D. Names and locations of:
 - (1) Lakes, rivers, streams, creeks and springs.
 - (2) Roads, highways and buildings.
 - (3) Active or abandoned facilities.
 - (4) Transmission lines within 500 feet of the exterior limits of land affected.
 - (5) Gas and/or oil pipelines.
 - (6) Site elevation.
- E. Drainage patterns of land affected:
 - (1) Overburden or topsoil removal and storage areas.
 - (2) Areas susceptible to erosion.
 - (3) Natural waterways.
 - (4) Constructed drainages, diversions, berms and sediment ponds (design calculations shall be included).
 - (5) Receiving waters (State Health classification).
 - (6) Directional flow of all surface waters (indicated by arrows).
- F. Known drill holes:
 - (1) Location.
 - (2) Status.

- (3) Depths and thicknesses of:*
- Water bearing strata.
 - Mineral deposits.
 - Toxic or potentially toxic materials.
 - Surficial or plant supporting material (topsoil and subsoil).
- G. Locations of disposal and stockpile areas:
- Topsoil and subsoil storage areas.
 - Overburden storage area.
 - Waste, tailings, rejected materials.
 - Raw ore stockpile(s).
 - Tailings-ponds and other sediment control structures.
 - Discharge points, water effluents (see #15[D]).

All maps should have a color code or other suitable legend used in preparation to clearly indicate surface features of the land affected. A general reference map completed on a 7.5 (1:24,000) USGS quadrangle sheet is recommended with additional large scale maps included for practical delineation of individual facilities, (e.g., 1:200; 1:500).

14. Acreage to be disturbed:

- A. Minesite (operating, storage, disposal areas, etc.): APPROX 15 ACRES AT A TIME
- B. Access/haul roads/conveyors: 1 ACRE
- C. Associated on-site processing facilities: 2 ACRES

15. Describe mining method to be employed, including:

- A. Mining sequence:
- Map delineating the yearly sequential disturbance (if surface mine) and/or surficial disturbance.
 - Narrative (including on-site processing or mineral treatment):
PLEASE REFER TO # 4 of ATTACHMENT
NO. 1.

Attach supplemental sheets and/or diagrams as necessary with cross reference to page number here: _____.

*Stratigraphic or lithologic logs if correlated to footage depths may be presented when labeled (maps or logs should be labeled confidential, if so desired).

B. If sedimentary deposit seam(s):

- (1) Thickness(es): 12 to 20 feet Gypsum bed
(2) Dip: ALMOST FLAT - slight dip toward the North
(3) Outcrop: AT SURFACE (CARMEL fm.)

C. Will any underground workings or aquifers be encountered? () Yes, (X) No. If yes, describe potential impacts and protection measures to be taken: _____

D. Describe any active discharge or proposed discharge of water from mine or site area. Include water quality data and lab test reports. If attached sheets or reports are included, cross reference to page number here: _____

NO water will be discharged

16. Have all necessary water rights been appropriated? () Yes, () No. How will water be obtained? Please explain: I will try to obtain permission from BLM to use a small amount of water from the pipeline that parallels the road in Sect 23. If this is not possible water will be hauled to the site.

17. Proposed or estimated duration of mining operation: _____
Will the permit term be for a lesser amount of time, subject to review? (e.g., for surety estimate reasons). () Yes, (X) No. If yes, how long? _____

18. Describe the construction and maintenance of access roads including:

- A. Procedures (drainage and erosion control methods).
B. Cross section(s).
C. Profile(s) of proposed road grade(s).

ACCESS will be gained via existing roads (see MAP ATTACHED)

Attach supplemental diagrams and cross reference to page number here: _____

19. Prior land use(s): GRAZING
Current land use(s): GRAZING
Possible projected or prospective future land use(s): GRAZING

20. Describe methods of tree and brush removal: Brush will be
Removed by either a ~~scraper~~ or bulldozer.
GRADER

Provide estimate of, and method of obtaining existing vegetation cover (%):
Existing vegetation covers approximately 60-80% of the
surface

What types of dominant vegetation are present? Low Sage, Rabbit brush
VARIOUS GRASSES

Photographs and/or maps may be attached to these forms, cross reference to page number here: _____.

21. Soils (surficial plant supportive material) and overburden: Except where slope or rocky terrain make it impossible, all surficial materials suitable as a growth medium shall be removed, segregated and stockpiled according to its ability to support vegetation (as determined by soil analysis and/or practical revegetation experience) prior to any major excavation. (Suggested minimum requirements are the top six inches, or the "A" horizon, whichever is larger.)

- A. What is the pH range of the soil before mining? NOT KNOWN
Name of person or agency and method of determining pH: _____

Attach lab report if available. Cross reference page number here: _____.

- B. Average depth of topsoil and subsoil to be stripped and stockpiled:
6 to 12 inches. Calculated volume of soil to be stockpiled: _____
APPROX 15 ACRES. 6 to 12" deep

- C. Describe the method for removing and stockpiling topsoil and subsoil, including measures to protect topsoil from wind and water erosion, compaction and pollutants: TOPSOIL will be pushed to the
west side of the MINING AREA using a bulldozer or
GRADER. TOPSOIL should be replaced within one year so
compaction will NOT be a problem. Low precipitation Rates will help
Reduce erosion of soil pile.

- D. Describe the method for removing and stockpiling overburden. Describe and discuss the acidity or alkalinity (pH) or other characteristics which would affect revegetation: NO overburden
has to be removed because the gypsum bed crops out
at the surface

- E. Rock subjected to processing such as waste rock, tailings, etc., and which is to be disposed of on- or off-site must be subjected to a toxicity analysis. The method of determination, results and suitable disposal methods must be explained in detail, including means for containment and long range stability*:

After mining the Gypsum is crushed dried and shipped. No chemicals or toxic substances are used during this process. Except for drying, the parent material is not altered. Material not suited for shipment will be returned to mined out area (very little is anticipated at this time).

22. Describe the methods used to minimize public safety and welfare hazards during and after mining operations including:

- A. Shaft, tunnel and drill hole closure.
B. Disposal of trash, scrap metal and wood and extraneous debris, waste oil and solvents, unusable buildings and foundations, sewage and other materials incident to mining.
C. Posting of appropriate warning signs and/or fences or berms to act as barriers (e.g., above highwalls) in locations where public access is available.

All trash will be removed and hauled to nearest city or county dump. No dangerous topographical features will be created. Signs will be posted around mine areas to warn public of any dangerous areas.

*"Toxic" means any chemical or biological or adverse characteristic of the material involved which could reasonably be expected to negatively affect ecological or hydrological systems or could be hazardous to the public safety and welfare.

23. Grading and soil redistribution.

- A. Attach pre- and postmining contour cross sections, typical of regrading designs. Cross reference to page number here: _____.
- B. Describe the method(s) of overburden replacement and stabilization and highwall elimination, including: (a) slope factors; (b) lift heights; (c) compaction; (d) terracing, etc., (e) also include testing procedures: _____

Refer to Reclamation Plan
ATTACHMENT # 2

- C. What method of spreading topsoil and subsoil or upper horizon material on the regraded area will be employed? TOPSOIL will be
SPREAD back over disturbed AREAS by GRADER
or BULLDOZER.

1. Indicate the approximate depth of soil cover after final surfacing _____ inches.
2. What tests will be performed to adequately evaluate the potential of the soil to successfully support intended revegetation? 10" to 12"

3. What soil amendments or fertilizers will be needed as an aid to revegetation? WHATEVER, if ANY, IS Recommended by the
Type: State or BLM Rate: _____
Type: _____ Rate: _____
Type: _____ Rate: _____
4. What additional surface preparations will be used? Describe (a) drainage, erosion and sediment control measures; (b) maximum slope characteristics; and (c) highwall reclamation.

Refer to Reclamation Plan
ATTACHMENT # 2.

5. Describe methods which may be particularly applicable to waste disposal areas determined to be potential problem areas.

N/A

- D. Describe plans for either leaving or reclaiming the roads and pads associated with the operation.

(No roads or pads will be constructed)
Refer to Reclamation plan Attachment
2 for other areas.

24. Impoundments: All evaporation, tailings and sediment ponds; spoil piles, fills, pads and regraded areas shall be self-draining and nonimpounding when abandoned unless previously approved as an impounding facility by a lawful state or federal agency. In view of this, please describe the reclamation of all related areas in the operation and include pertinent items enumerated in C, 1-5 above.

Refer to Reclamation plan
ATTACHMENT # 2.

25. Revegetation plans:

- A. What organization, agency or person will specifically be performing the revegetation? NOT CONTRACTED AT THIS TIME.
- B. Will the affected area be subject to livestock or wildlife grazing?
(X) Yes, () No. Will vegetation protection be needed to allow for a determination of the successful revegetation criteria outlined in the Mined Land Reclamation Act, Rule M-10(12)? () Yes, (X) No. If yes, what measures will the operator take? NOT ANTICIPATED AT THIS TIME HOWEVER, IF CATTLE NEED TO BE CONTROLLED DISTURBED AREAS WILL BE FENCED.
- C. Will irrigation be used? () Yes, (X) No. Type: _____
_____. For how long? _____.

- D. Test plots initiated during the early stages of mine development provide good bases from which a successful revegetation program can be adapted for later implementation. Will test plots be employed?
() Yes, (X) No. If yes, describe on an additional sheet(s) and attach. Cross reference page number here and show location on facilities map: _____.
- E. Please attach a revegetation plan and schedule including:
1. Species to be used. *PLEASE Refer to ATTACHMENT*
 2. Rate of seed application/acre. *NO 3.*
 3. Season to be planted.
 4. Seedbed preparation techniques.
 5. Planting location, slope face direction, variability, method of application, covering, etc.
 6. Mulch and fertilizer application, if used.
- F. Describe any other maintenance procedures which may be used, if needed, to guarantee successful revegetation:
NONE Anticipated.

26. Please provide a reclamation schedule including:

- A. Estimated time for construction. *JAN Feb 1986*
B. Estimated time for interim reclamation. *OCT 1986*
C. Estimated duration of the mining operation. *ongoing*
D. A time table for the accomplishment of each major step in the reclamation plans. Attach the schedule and cross reference to the page number here: *RECLAMATION WILL FOLLOW MINING After APPROXIMATELY 10 TO 12 Acres HAVE BEEN MINED OUT - PLANTING will be done in the fall of each year.*
27. A surety guarantee must be provided for the mining operation (see Rule M-5 Mined Land Reclamation Act). In calculating this amount, the Division will consider the following major steps based on the information provided in this report:
- A. Clean up and removal of structures.
 - B. Backfilling, grading and contouring.
 - C. Topsoil and subsoil redistribution and stabilization.
 - D. Revegetation (i.e., preparation, seeding, mulching, irrigation).
 - E. Labor.
 - F. Safety and fencing.
 - G. Monitoring, and reseedling if necessary.

To assist the Division, the operator may attach a list of costs and factors which would satisfy these areas. Substantiation of these factors, i.e., unit costs and how they are derived, should accompany the list. Cross reference the page number here: *Refer to ATTACHMENT # 3 item 5.*

28. A request for a variance from specific commitments to Rule M-10 (Reclamation Standards) of the Mined Land Reclamation Act may be submitted with adequate written justification. If after presentation of information adequately detailing the situation, a determination is made that finds a portion of the rule inapplicable, a variance may be granted by the Division.

I hereby commit the applicant to comply with Rule M-10, "Reclamation Standards" in its entirety, as adopted by the Board of Oil, Gas and Mining on March 22, 1978.

The applicant will achieve the reclamation standards for the following categories as outlined in Rule M-10 on all areas of land affected by this mine, unless a variance is granted in writing by the Division.

<u>Rule</u>	<u>Category of Commitment</u>	<u>Variance Requested? - None</u> <u>AT THIS TIME</u>
M-10(1)	Land Use	_____
M-10(2)	Public Safety and Welfare	_____
M-10(3)	Impoundments	_____
M-10(4)	Slopes	_____
M-10(5)	Highwalls	_____
M-10(6)	Toxic Materials	_____
M-10(7)	Roads and Pads	_____
M-10(8)	Drainages	_____
M-10(9)	Structures and Equipment	_____
M-10(10)	Shafts and Portals	_____
M-10(11)	Sediment Control	_____
M-10(12)	Revegetation	_____
M-10(13)	Dams	_____
M-10(14)	Soils	_____

I believe a variance is justified on a site-specific basis for the previous subsections of Rule M-10 as indicated. A narrative statement explaining these concerns is attached.

STATE OF UTAH

COUNTY OF SALT LAKE

I, AL CORNELL, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: Al Cornell

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 27th day of December, 1985.

Notary Public: Marjorie L. Henderson

My Commission Expires: July 24, 1989

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps.

Only information relating to the location, size or nature of the deposit may be protected as confidential.

Confidential Information Enclosed: () Yes (X) No

MINE MAPS

1. Maps must be clear and legible contour maps or recent aerial photos. The scale should be 1 inch = ^{1:6,000}500 feet to adequately show topographic features.
2. Map sheets should be of a reasonable size, not to exceed 48 inches on a side.
3. Maps must have a title block with:
 - A. Map title.
 - B. Name and address of permittee.
 - C. Permit and amendment numbers.
 - D. Annual report period.
 - E. Scale, north arrow, contour interval, date of photography, etc.
4. All maps must show:
 - A. Legal subdivisions.
 - B. Permit area boundary clearly shown and labelled.
 - C. Amendment areas clearly shown and labelled.
 - D. Contour features.
5. The following features should all be clearly identified:
 - A. Topsoil stockpiles (numbered and with volumes).
 - B. Settling ponds and sediment control structures.
 - C. Haul roads.
 - D. Pits identified by location, name, number, etc.
 - E. Ramps (numbered).
 - F. Out-of-pit spoil dumps.
 - G. All waste disposal sites including, but not limited to:
 1. Landfill sites.
 2. Carbonaceous waste dumps.
 - H. Diversion ditches.
 - I. Monitoring sites.

**Castle Valley
Mining Company**



Gypsum — Sulfur — Gold — Silver
Iron — Copper — Uranium — Etc.

A. J. CORNELL
(801) 637-6520
(801) 381-5590

P.O. Box 1240
Castledale, Utah 84513

Mine & Mill Equipment Design & Financing

Sierra Minerals Corp. of Calif.

C.G. Rogers
President

Box 36
Smartville, CA 95977

916-639-2337
702-329-0932

MINING PLAN

Filed by

Castle Valley Mining Company
to satisfy the requirements of
43 CFR 3809.1-5

1. Operator Name and Mailing Address

Castle Valley Mining Company
Attn: Mr. A. J. Cornell

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2. Mining Claim Name and Serial Number

White Cap #7 - UMC 284055

3. Location

T. 19 S., R. 10 E., NW1/4 sec. 23, SLC Base and Meridian
Buckhorn Reservoir Quadrangle

4. Description of Operation

Castle Valley Mining Company is planning to mine gypsum from the deposits that crop out along the low ridge just north of Cloyds Pond. Because the deposit is flat lying and crops out at the surface, mining will be done utilizing surface mining methods in the following sequence:

- a. Topsoil will be removed and stockpiled adjacent to the mine area.
- b. The relative flat-lying beds of gypsum will be ripped utilizing a bulldozer.
- c. One or two front-end loaders will load the broken gypsum onto a conveyor belt that will transport the rock ~~to the mill~~ ⁱⁿ to the mill. *Huntington.*
- d. The mill will be housed in a steel 200' x 40' building. Portions of this building will also be utilized for maintenance shops and offices. Rock delivered to the mill will first be cycled through the primary (jaw-type) crusher located just outside of the building.
- e. After ore has passed through the primary crusher it is sent to the secondary crusher where it is classified to the finished size.
- f. Properly sized ore is heated to remove any moisture and then shipped utilizing conventional dump trucks licensed for highway use.

5. Access

Access to and from the mine will be via existing roads (County, State & BLM). Approximately 1 acre has been disturbed in road access on the mine site. These roads will be upgraded and maintained as necessary onsite (refer to attached map for general location) during operations.

6. Time Frames

If proper permits and permission can be obtained construction of the mill should begin during late October or early November. Once in operation the mine will operate year round (weather permitting) .

7. Periods of Nonoperation

Extended periods of nonoperation are not expected, but should they occur, measures to be taken to maintain the area in a safe and clean manner and to reclaim the land involved to avoid erosion and other adverse impacts shall be filed with the Authorized Officer.

8. Prevention of Unnecessary or Undue Degradation

To prevent unnecessary and undue degradation all operations will be conducted in a customary and usual manner and consider the effects of mining on other resources and land uses. The pipeline that runs adjacent to the existing road will be protected and mine areas will be fenced to protect livestock. Disturbed areas will be reclaimed according to the attached reclamation plan and BLM recommendations.

9. Power

Power will be generated on site utilizing diesel-powered generators.

RECLAMATION PLAN

1. Access to and from the mine will utilize the network of existing roads.
2. The operation will mine only ore. Since no overburden exists at the area to be mined, there will be no waste dumps created.
3. Processing the ore involves only crushing and drying; as such, there will be no deleterious materials or substances used or generated at the mine, nor will there be any generation of mill tailings.
4. Reclamation will be an ongoing process.
5. Reclamation will be commensurate with mining and will include the following steps:
 - a. Topsoil will be pushed aside and stockpiled.
 - b. Mining will proceed from east to west and remove the ore to a depth of about 12 to 20 feet over most of the small knoll. No pits will be created and few if any highways will be developed. As stripping continues the entire elevation of the knoll will be reduced about 15 feet. If any unnatural-appearing benches or highwalls are created during the course of mining, they will be reshaped to blend into the existing contour.
 - c. After reshaping the mined out areas, topsoil will be spread back over disturbed areas.
 - d. Standard farming methods will be used to prepare seed bed prior to planting.
 - e. Disturbed areas will be planted according to BLM recommendations for seed type and amount, season of planting and fertilizer requirements, if any.

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